

REMARKS

Claims 1-8 are pending in this application with claims 1 and 7 being amended by this response and claim 8 being added.

Claim 1 has been amended to recite "wherein the general purpose operating system and the real-time kernel are both arranged to execute as processes on the processor using a common operating system kernel". Support for this amendment can be found throughout the specification and, specifically on page 9, line 10 to page 10 line 4. Additionally, claim 7 has been formally amended to remedy a typographical error. Claim 8 has been added to recite that the "displayed image concurrently displays both non-real time and real time data." Support for this amendment can be found throughout the specification and, specifically on page 7, lines 25-30. Therefore, it is respectfully submitted that no new matter has been added by the amendments to claims 1 and 7 and the addition of claim 8.

Rejection of Claims 1-7 under 35 USC § 103(a)

Claims 1-7 are rejected under 35 USC § 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Dinwiddie, Jr. et al. (U.S. Patent No. 5,434,590).

The present claimed invention in amended claim 1 provides a critical care workstation. The work station includes a display device and a processor coupled to the display device. The processor executes a general purpose operating system, controlling execution of a selected one of a plurality of non-real-time application programs for displaying images representing non-real-time data on the display device. The processor also executes a real-time kernel controlling execution of a process for displaying images representing real-time data on the display device concurrently with the display of the non-real-time data. The general purpose operating system and the real-time kernel are both

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arranged to execute as processes on the processor using a common operating system kernel. The circuitry is responsive to user input for selecting the non-real-time display program from among a plurality of available non-real time display programs.

Applicant's admitted prior art (hereinafter AAPA) neither discloses nor suggests that "the general purpose operating system and the real-time kernel are both arranged to execute as processes on the processor using a common operating system kernel" as in the present claimed invention. In fact, the prior art describes a system displaying images representing both real-time data and non-real-time data as having "two different computer systems, one real-time computer system...and another general-purpose system"(Specification, page 3, lines 5-16). Thus Applicant respectfully submits AAPA neither discloses nor suggests "wherein the general purpose operating system and the real-time kernel are both arranged to execute as processes on the processor using a common operating system kernel" as in the present claimed invention.

In addition, while page 3, lines 5-9 of the Specification describes the desirability of displaying "both images representing real-time data, such as ECG waveforms, and images representing non-real-time data, such as laboratory results, X-rays, trend data, ventilator loops, etc.," this passage neither discloses nor suggests "circuitry, responsive to user input, for selecting the non-real-time display program from among a plurality of available non-real-time display programs" as in the present claimed invention. In fact, page 4, lines 1-2 of the Specification recite "only the non-real-time data **designed** into the system can be displayed." The present claimed invention, on the other hand, does not require the non-real-time data to be designed into the system. Rather, the present claimed invention is "responsive to user input" and provides "circuitry...for **selecting** the non-real-time display program from among a plurality of available non-real-time display program." These features are neither disclosed nor suggested in AAPA.

Dinwiddie describes a system for transferring and composing image signals including a plurality of media sources configured to provide a corresponding plurality of

image signals. The independent image signals are composed in response to control information. The media control module receives a composed image signal from the media bus and provides the composed image signal to a display device. However, Dinwiddie neither discloses nor suggests “a processor, coupled to the display device, executing: a general purpose operating system, controlling execution of a selected one of a plurality of non-real-time application programs for displaying images representing non-real-time data on the display device; and a real-time kernel, controlling execution of a process for displaying images representing real-time data on the display device concurrently with the display of the non-real-time data” as in the present claimed invention. Rather, Dinwiddie in column 4, lines 30-58, describes a system that includes a multimedia core which includes, “media control module 30 and may include audio module 31, graphics accelerator module 34, processor module 36 and programmable receiver module 38.” Modules 31, 34, 36 and 38 are media sources (devices which provide media signals). The signals produced by the modules 31, 34, 36 and 38 are provided by a processor module for accessing the media bus. Selective access to the media bus enables composition of the independent image signals from the modules 31, 34, 36, 38 in response to control information to generate a composite image for display on a display device” (Dinwidde, col. 3, lines 17-23; 44-46). Dinwiddie is merely a combination of signals from a plurality of media sources. Therefore, Dinwiddie does not recognize or attempt to resolve the problem resolved in the present claimed invention. Specifically, choosing which media input signals are used to generate a composite signal (in real-time) is NOT a system having “a general purpose operating system, controlling execution of a selected one of a plurality of non-real-time application programs for displaying images representing non-real-time data on the display device; and a real-time kernel, controlling execution of a process for **displaying images representing real-time data on the display device concurrently with the display of the non-real-time data**” as in the present claimed invention. Furthermore, Dineiddie neither discloses nor suggests “the general purpose operating system and the real-time kernel are both arranged to execute as processes on the processor using a common operating system kernel” as in the present claimed invention.

Also, Dinwiddie, similarly to AAPA, neither discloses nor suggests "circuitry, responsive to user input, for selecting the non-real-time display program from among a plurality of available non-real-time display programs" as in the present claimed invention. Rather, Dinwiddie merely discloses accessing modules for selecting from which module the composite signal will be generated. Thus, there is no 35 USC 112, compliant enabling disclosure regarding the claimed arrangement.

It is also respectfully submitted that there is no reason or motivation to combine AAPA and Dinwiddie as AAPA is directed towards critical care workstations displaying images representing real-time and non-real-time data wherein the real-time data is physiological data, while Dinwiddie is concerned with multimedia computer systems, which combine the information handling characteristics of traditional computer systems with high quality video and audio presentations, and the real-time composition of a plurality of independent image signals, including full motion video image signals, for display without the use of video memory. The systems of the AAPA and Dinwiddie are non-analogous art and thus it is respectfully submitted that it would not be obvious to combine these systems. Dinwiddie is in the area of multimedia computer systems which is not an area one of ordinary skill would consult to address a problem of concurrent process execution. Additionally, neither of these references are concerned with a general purpose operating system and a real-time kernel that are arranged to execute as processes on a processor using a common operating system kernel as in the present claimed invention.

However, even if these references were combined, such a combination would produce a multimedia computer system displaying images representing real-time and non-real-time data without the use of video memory. This combination still neither discloses nor suggests a system in which "the general purpose operating system and the real-time kernel are both arranged to execute as processes on the processor using a common operating system kernel" as in the present claimed invention. This combination also neither discloses nor suggests "circuitry, responsive to user input, for selecting the non--

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real-time display program from among a plurality of available non-real-time display
programs" as in the present claimed invention.

In view of the above remarks, the amendments to claims 1 and 7, and the dependence of claims 2-7 on claim 1, it is respectfully submitted that AAPA and Dinwiddie, when taken alone or in combination, provide no 35 USC 112 compliant enabling disclosure showing the above discussed features. It is thus further respectfully submitted that this rejection is satisfied and should be withdrawn.

Dependent claim 8 has been added. Claim 8 is considered to be patentable based in its dependence on independent claim 1. Therefore, the arguments presented above with respect to claim 1 also apply to claim 8. Support for new claim 8 can be found throughout the Specification, specifically on page 7, lines 25-30. Thus, no new matter is added by this additional claim. In addition, AAPA and Dinwiddie et al., individually or combined, neither disclose nor suggest that "a displayed image concurrently displays both non-real time and real time data" as in claim 8 of the present invention.

Having fully addressed the Examiner's rejections, it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the applicant's attorney at the phone number below, so that a mutually convenient date and time for a telephonic interview may be scheduled.

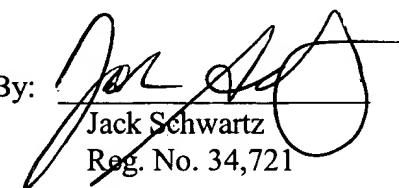
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please charge the fee to Deposit Account 50-2828.

Respectfully submitted,
Samuel Cavallaro et al.

By:



Jack Schwartz
Reg. No. 34,721

Jack Schwartz & Associates
1350 Broadway, Suite 1510
New York, New York 10018
Tel. No. (212) 971-0416
Fax No. (212) 971-0417
November 8, 2005



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A handwritten signature in black ink, appearing to read "Jack Schwartz".
Jack Schwartz